



**Missouri Department of Natural Resources**  
**Missouri River - WBID 0701**  
**Missouri Department of Conservation Fish Egg Data, 2004**

Org	Site Name	Year	Species	# in Sample	Prep	Length, in.	Weight, lbs.	PCB, mg/kg
MDC	Missouri R. @ Mokane	2004	shovelnose sturgeon	1	eggs	23.5	1.7	1.52
MDC	Missouri R. @ Mokane	2004	shovelnose sturgeon	1	eggs	24.4	2.1	1.14
MDC	Missouri R. @ Mokane	2004	shovelnose sturgeon	1	eggs	23.7	1.8	0.454
Average:								1.038

Historically, most states adhered to the Food and Drug Administration guidance to prohibit fish consumption if PCB levels in fillets exceeded 2 mg/kg. More recently, the U.S. Environmental Protection Agency and Food and Drug Administration have recommended that states no longer use this value. In response to this recommendation, the Missouri Department of Health and Senior Services, or MDHSS, conducted a human health risk assessment for consumption of fish contaminated with PCBs to use for its annual fish consumption advisory. Its recommendations are shown in the table below. Information on the number of fish meals consumed by sport fishermen is shown in the middle column of the table. This information is from "Sport-Caught Fish Consumption in Missouri--2002 Mail Survey" by McKee, et al., Missouri Department of Conservation.

Number of Fish Meals	Percent of Missouri Anglers Eating at Least This Number of Fish Meals	PCBs in Fish Fillets (mg/kg)
Unlimited	5% (3 or more per week)	<0.04
2 per week	25%	0.04-0.10
1 per week	50%	0.10-0.37
1 per month		0.37-0.75
Do not eat		>0.75

The mean level of PCBs in fish eggs in this segment of the Missouri River is 1.038 mg/kg. Based on the MDHSS advisory levels, this mean represents a level of PCBs that prohibits fish consumption. However, these criteria were developed based on estimated consumption rates of fish fillets. There is no known available data on the consumption rates of fish eggs, either in Missouri or the United States in general. Although the existing criteria may not be appropriate to apply to fish eggs, and consumption within Missouri may not be great enough for PCBs to constitute an impairment of the Fish Consumption use, it is important that the public be aware of the potential risks involved in eating fish eggs from this portion of the Missouri River. Given that there is no available data on fish egg consumption by Missourians, this data is judged not to constitute scientifically defensible evidence of impairment of the Fish Consumption beneficial use.

The Missouri Department of Health and Senior Services has issued a "Do Not Eat" advisory for all consumers on sturgeon eggs collected from the Mississippi River, due to PCBs and chlordane.